

NAS Whiting
Field Team sees
the Big Picture
thanks to
Internet-based
Geographic
Information
System (GIS).

GIS enhances Team's ability to evaluate accumulated information and plan efficient utilization of limited remediation funding.

A large quantity of environmental data was collected in several years of site investigation at NAS Whiting Field. The data was collected by various contractors and resided in several locations. Planning for ongoing site investigations was being performed and reviewed at different locations by contractors, the Navy, and state and federal regulators. The danger existed for both redundant data collection and data gaps to occur, unless an efficient method was devised for assessing the big picture.

The team (EPA, FDEP, SouthDiv, NAS Whiting Field, CLEAN and RAC contractors) recognized the need to combine all available data into a single comprehensive database, and to provide a convenient means for interpretation of the data as it is collected.

The solution was to establish a single electronic format data repository. A state of the art Geographic Information System (GIS) based on ArcView ® was chosen to collect the data into one comprehensive data base, with the capability to produce two- and three-dimensional graphic representations of soil and groundwater contamination.

A password-protected Internet home page was created for the GIS system, making it accessible to all team members via the Internet. Creating the GIS data base required a dedicated team commitment to identification and definition of the data base parameters, verification of the data to real-world conditions, and planning for the implementation of the system.

The web-based GIS provides all members of the team with immediate access to important environmental data for use in planning, review, and analysis. Information is easily updated as new data is collected and validated for use. Data gaps and duplication of effort are avoided in the planning stages. The ability to visualize the contaminant plumes as they exist makes it possible to come to faster conclusions and make better decisions concerning the most efficient and effective remediation solutions. This tool has enabled the team to wisely spend the very limited funds available for environmental restoration.

System provides graphic display showing nature and extent of base-wide contamination and enables the team to reduce cost, improve quality and speed up the planning process for further field work and site remediation decisions.

